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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte PEIGUANG ZHOU, FUNG-JOU CHEN, JEFFREY DEAN LINDSAY, IVAN SCHRODT, FRANK G. DRUECKE, and JULIE BEDNARZ

> Appeal 2010-001518 Application 10/733,169 Technology Center 1700

Before CHARLES F. WARREN, TERRY J. OWENS, and JEFFREY T. SMITH, *Administrative Patent Judges*.

OWENS, Administrative Patent Judge.

DECISION ON APPEAL¹ STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-8, 12, 17, 18, 21-31, 35, 36, 41-53, 56-60, 62, and 63.

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" (paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

Claims 9-11, 13-16, 19, 20, 32-34, 37-40, 54, 55, 61, and 64-91, which are all of the other pending claims, stand withdrawn from consideration by the Examiner. We have jurisdiction under 35 U.S.C. § 6(b).

The Invention

The Appellants claim a scrubbing product. Claims 1 and 29 are illustrative:

1. A scrubbing product comprising:

a plurality of abrasive structures comprising an abrasive layer and an absorbent layer, the abrasive structures being configured in a stacked arrangement such that the abrasive layers and the absorbent layers alternate;

a liquid absorbent substrate having a top surface and a bottom surface, the plurality of abrasive structures being attached to the top surface; and

an attachment structure for releasably attaching the plurality of abrasive structures together, the attachment structure permitting a top abrasive structure to be removed from the scrubbing product by a user pulling on the top abrasive structure.

29. A scrubbing product comprising:

a substrate; and

a plurality of scrubbing layers wrapped around the substrate, each of the scrubbing layers comprising an abrasive structure including an abrasive layer adhered to a fibrous cellulosic web, the abrasive structures being configured in an arrangement such that the abrasive layers and the fibrous cellulosic webs alternate, wherein the scrubbing layers are configured to be sequentially removed from the scrubbing product thereby exposing an unused scrubbing layer lying below the removed layer.

The References

Haq (EP '463)	EP 0 066 463 A1	Dec. 8, 1982
Zafiroglu	4,704,321	Nov. 3, 1987
Funch (WO '610)	WO 93/02610 A1	Feb. 18, 1993
Clarke (EP '974)	EP 1 212 974 A1	Jun. 12, 2002
Prodoehl	2003/0028985 A1	Feb. 13, 2003

The Rejections

The claims stand rejected under 35 U.S.C. § 103 as follows: claims 1-4, 7, 8, 12, 18, 21, 22, 26, 29, 35, 36, 43, 44, 47, 48, 50, 51, 53, 56, 57, 62, and 63 over WO '610 in view of EP '974; claims 5, 6, 23-25, 27, 28, 30, 31, 41-46, 49, 52, and 58-60 over WO '610 in view of EP '974, Prodoehl and Zafiroglu; and claim 17 over WO '610 in view of EP '974 and EP '463.

OPINION

We affirm the rejections.

Issue

Have the Appellants indicated reversible error in the Examiner's determination that WO '610 and EP '974 would have rendered prima facie obvious, to one of ordinary skill in the art, 1) abrasive structures, each comprising an abrasive layer and an absorbent layer, which are configured in a stacked arrangement such that the abrasive layers and the absorbent layers alternate (claims 1 and 47), or 2) a plurality of scrubbing structures which are wrapped around a substrate and each comprise an abrasive layer adhered to a fibrous cellulosic web (claim 29)?

Findings of Fact

WO '610 discloses "a disposable wash cloth comprising two absorbing layers which are mutually separated by a plastic sheet, and in which one of the layers is moistened with a detergent and/or a disinfectant substance, and in which the other of the layers may be dry or moistened" (p. 1, Il. 3-7; Fig. 1). The absorbing layers preferably are made of paper pulp (p. 4, I. 39 – col. 5, I. 2).

EP '974 discloses a disposable dishwashing wipe comprising at least one scrubbing substrate and at least one paper or nonwoven fiber cleaning substrate, the scrubbing and cleaning substrates preferably being attached, potentially reversibly attached, to each other (¶¶ 0009-11, 0025-26).

Regarding the arrangement of the substrates EP '974 discloses (¶ 0025):

Where the wipe comprises only one cleaning and one scrubbing substrate the substrates are preferably packed in a layered fashion, back to back. Where the wipe comprises two or more cleaning substrates it is preferred that the cleaning substrates are packed in a layered fashion, back to back, and at least one scrubbing surface is then attached to one side of one of the cleaning substrates. Where the wipe comprises two or more scrubbing substrates, said substrates may be packed side by side such that both scrubbing substrates are in contact with the cleaning substrate. Alternatively and most preferably where the wipe comprises two or more scrubbing substrates the substrates are arranged one on top of the other in a layered fashion, one of the scrubbing substrates being in contact with the cleaning substrates.

Analysis

Claims 1 and 47

The Examiner argues that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added an abrasive synthetic polymer layer to some or all of the absorbent plies of WO '610 as taught by EP '974, with the expectation that this would further enhance the cleaning and scrubbing properties of the cleaning material" (Ans. 4).

The Appellants argue that combining WO '610 and EP '974 would not yield the Appellants' claimed scrubbing product because the abrasive structures comprising an abrasive layer and an absorbent layer would not be in stacked arrangement but, rather, would be separated by WO '610's plastic sheet which cannot function as an abrasive layer or an absorbent layer (Br. 7-9).

That argument is not persuasive because absorbent layers 1 and 2 in WO '610's Figure 1, with an EP '974 abrasive layer on the left side of each (i.e., on the side opposite the adhesive (5) which adheres the absorbent layer (1, 2) to the plastic sheet (4, 6)), would provide a plurality of abrasive structures which comprise an abrasive layer and an absorbent layer, and the abrasive structures would be in a stacked configuration such that the abrasive layers and the absorbent layers alternate, regardless of the presence of the plastic layer between them. The "comprising" transition term in the Appellants' claims 1 and 47 opens the claims to other components such as a plastic sheet, see In re Baxter, 656 F.2d 679, 686 (CCPA 1981), and the claims do not require that the abrasive structures are in direct contact with each other.

The Appellants argue that WO '610 discloses that it is advantageous for two of the absorbent layers (2, 3; Fig. 1) to be sterile (p. 4, ll. 22-23), whereas EP '974 fails to suggest the usefulness of maintaining sterility (Br. 10).

The benefit of maintaining sterility is disclosed in WO '610 (p. 3, ll. 23-27). It appears that one of ordinary skill in the art, through no more than ordinary creativity, who desired to provide the benefit of enhanced cleaning and scrubbing in the WO '610 wash cloth as argued by the

Examiner (Ans. 4), would have used a sterilized EP '974 abrasive layer with each of WO '610's sterile absorbent layers to maintain the sterility desired in WO '610. See KSR Int'l. Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007) (In making an obviousness determination one "can take account of the inferences and creative steps that a person of ordinary skill in the art would employ").

Claim 29

The Examiner takes official notice that it was known in the art to wrap plies of cleaning sheets in roll form, such as paper towels and baby wipes (Ans. 4-5). The Examiner argues that the Appellants' claim 29 requirement that the scrubbing layers are wrapped around a substrate does not require that the scrubbing product is used in that form and, alternatively, argues that a roll of paper towels having an abrasive layer could be used as a scrubbing product in that form, although doing so would be awkward (Ans. 8-9).

The Appellants argue (Br. 12):

In contrast to a conventional roll of paper towels, for example, the scrubbing product of claim 29 is utilized as a whole – as a single product for cleaning. Then, when the outside layer of the scrubbing product is soiled, it can be sequentially removed from the scrubbing product thereby exposing an unused scrubbing layer lying below the removed layer. As such, the claimed scrubbing product is not equivalent to the known roll of paper towels, etc.

That argument is not well taken because the Appellants are arguing a limitation that is not in claim 29. *See In re Self*, 671 F.2d 1344, 1348 (CCPA 1982). A roll of paper towels each having an abrasive layer and a fibrous cellulosic web layer such as in the EP '974 embodiment wherein two or more scrubbing substrates are side-by-side on a cleaning substrate (p. 6,

II. 7-8), would provide alternating abrasive and fibrous cellulosic web layers, and removal of a towel would expose, to at least some extent, an unused towel below it, in accord with the structural requirements of the scrubbing product claimed in the Appellants' claim 29. Regardless, the Examiner has argued that a roll of paper towels is capable of being used as a scrubbing product by itself instead of using an individual towel which has been separated from the roll (Ans. 9), and the Appellants have not challenged that argument.

Conclusion of Law

The Appellants have not indicated reversible error in the Examiner's determination that WO '610 and EP '974 would have rendered prima facie obvious, to one of ordinary skill in the art, 1) abrasive structures, each comprising an abrasive layer and an absorbent layer, which are configured in a stacked arrangement such that the abrasive layers and the absorbent layers alternate (claims 1 and 47), and 2) a plurality of scrubbing structures which are wrapped around a substrate and each comprise an abrasive layer adhered to a fibrous cellulosic web (claim 29).

DECISION/ORDER

The rejections under 35 U.S.C. § 103 of claims 1-4, 7, 8, 12, 18, 21, 22, 26, 29, 35, 36, 43, 44, 47, 48, 50, 51, 53, 56, 57, 62, and 63 over WO '610 in view of EP '974, claims 5, 6, 23-25, 27, 28, 30, 31, 41-46, 49, 52, and 58-60 over WO '610 in view of EP '974, Prodoehl and Zafiroglu, and claim 17 over WO '610 in view of EP '974 and EP '463 are affirmed.

It is ordered that the Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

sld

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